

## *Gerald's Column* by Gerald Fitton

This month I want to discuss Paul's aim for the future of Archive.

One of the better tips I received about good teaching practice was this "Always start with a digression"; another was that "All the best digressions are relevant". So let me set you a challenge; can you see where my digressions are leading before we get there?

### **First Edition**

Archive is now into its twelfth volume. Was it really eleven years ago that I received, free of charge, a copy of the first Archive magazine? I still have it in the attic tied up with good old fashioned white sisal string with all the other issues from that volume. I'm not sure why I was honoured with that first edition of Archive but I suspect that it was because I was on Acorn's Independent Software Vendors (ISV) list at the time. I had written a number of BASIC programs and a few programs in ARM code including some screen dumps. Acorn were encouraging software writers to write programs for their new machine and they provided ISVs with all sorts of little perquisites including a small discount on their highly expensive machines; so I signed up with Acorn as an ISV and told them all about my trivial programs. I even sold a few copies of my software to Australia thanks to the publicity Acorn gave to their ISVs. I found it much more difficult to write WIMP based programs than single tasking programs and so my output, like many other small writers, declined.

### **Teaching**

Over the last two or three decades the public perception of the teaching profession has declined steadily. It is only in the last few months that I have detected the beginnings of a reversal in this trend. Let me tell you a story which, like all my best stories, is almost true.

Some of the Lecturers at the College where I once taught felt so insecure that, early in the first lesson with their new students, they would write all their qualifications on the board! By contrast I refused to have mine printed in the 'Staff List' which was placed in the College Library. I generally avoided saying anything about my qualifications to first year students. Towards the end of their second and final year, as part of the College Quality Control System, the students would be asked by the College Management to write a short comment about every Lecturer who had taught them during their two years. It was only then that it would dawn on them that they had no idea what my qualifications were. After their experience of me they refused to believe that the absence of any in the 'Staff List' implied that I had none! It was inevitable that someone would be brave enough to ask.

When asked any question, like every good teacher, I would use it as an opportunity to teach something. I was always amused by the 'Qualifications question'. When faced with the need to tell the truth about my many and varied qualifications I would write them out one by one both in the short and long form and, from long practice, I had an anecdote to relate about each set of letters, what they meant and how I came to be awarded them. The intention of my anecdotes was to teach the students that qualifications were not to be regarded as trivial appendages to a name but that each represented not only achievement

but also knowledge, insight, hard work and sacrifice.

It never failed to surprise me that the students would always wait until I signalled that I had completed my extensive list before they asked their 'big' question. On every occasion I was asked "With all these qualifications, why are you only a teacher?" Of course these students had asked me why I was a teacher many times before and my answers, like the intrinsic nature of Truth, were many and varied.

This inevitable question provided yet another teaching opportunity. I believe that it is a Jewish tradition to answer a question with a question. I would say something like: "That's an interesting question because it reveals the opinion you have of teaching as a profession! How did you form that opinion?" The discussion which followed was usually most revealing both to me and to the students whose education was in my care. It was my hope that, at the end of the discussion, some would understand that their opinion of the teaching profession had been born of ignorance and prejudice.

Students can distinguish between a 'good' and 'bad' teacher with a speed which I found frightening; only computers make decisions more quickly! The few or many qualifications of the teacher (and their relevance) do not form part of that assessment! Was I that decisive about my teachers when I was at school?

You will have seen those stickers in the back of cars some of which contain a few words of wisdom. One which I like is "If you can read this then thank a teacher". That this sticker is not treated with the contempt that it would have been a couple of years ago is a sign that the status of the teaching profession has ceased to decline.

What has teaching to do with Paul's aim for the future of Archive?

## **Everyone is a Learner**

In his Foreword to Volume 11 No 12 Paul writes: "My aim is that, whether you're a beginner or the techiest of techies, you should feel that, as you read Archive, you are learning something."

Soon after starting up the PipeLine User Group I decided on similar aims. Let me quote from one of our publicity leaflets which, at that time, was directed to users of PipeDream: "PipeLine is a forum for those who want to share their knowledge, improve their techniques and discover how best to approach more difficult projects! We encourage members to write to us with applications, ideas and problems. They send us examples, hints & tips and other suggestions." Since then we have expanded from supporting users of PipeDream to supporting users of many other packages including Fireworkz, Impression and now, through GoldLine, BASIC, Ovation, TechWriter, DrawPlus and many more.

From my experience editing these user group articles I have discovered is that even the "techiest of techies" sometimes overlook the simplest of solutions to a 'simple' problem and often it is those who claim to be ignorant of all things 'techie' who come up with the most elegant solutions to the 'difficult' problem. I find it interesting that each group (techie and ignoramus) praises the knowledge and acumen of the other.

An article does not have to be highly technical to interest a 'techie' nor should the highly

technical article be full of terms which are unintelligible to the novice. All subject matter, even the higher mathematics which I once taught, can be made intelligible to those who are interested. It is my hope that those of you who have read some of my mathematical articles in Archive will agree that higher mathematics can be made both interesting and understandable even to those who profess to be non-numerate.

## **Not Everyone is a Teacher**

So, as an avid and unrepentant educationalist I am in sympathy with and approve of Paul's aim that everyone reading Archive should learn something from it.

The Government has proposed that the unemployed can be dropped into a classroom to act as helpers. When questioned about screening these volunteers for suitability, the official reply emphasises that those with a criminal background etc will be barred! It is possible that they will be screened for qualifications too but what is not mentioned is whether they will be screened to see if they have the ability help students.

One suggestion which has been put to Paul is that the Archive magazine could provide support to users through a panel of experts consisting of programmers, designers and perhaps ex-Acorn employees.

I see difficulties with both of these proposals. Those of you who have followed the implications of my earlier paragraphs will have noticed that I do not agree that only experts make good teachers. Accordingly, my objection to the Government proposal has nothing to do with the helper's expertise – or lack of it. From my earlier discussion of qualifications you will appreciate that I do not believe them to be an essential requirement for a teacher. In my opinion knowledge is more important. Indeed, I must have spent many man-years (or, in these enlightened days of equality, should that be person-years?) participating in Staff Training sessions designed to indoctrinate my colleagues and myself into believing that the primary purpose of our employment was to ensure that our students became qualified. Those employees who tried to introduce the notion that education of students was more important than providing qualifications were stigmatised as disloyal employees! As a result of these Staff Training Sessions I have even less respect for qualifications than I had twenty years ago!

## **What Makes a Good Teacher?**

During the last decade, and maybe for a few years before that, the perceived wisdom has been that learning should be 'Student Based' rather than 'Teacher Based'. Phrases such as 'Student Centred Learning' appeared on every flip chart and every handout issued at those dreary Staff Training Sessions. I was never popular with those who ran these sessions because I believed, and still do believe, that the move towards 'Student Centred Learning' went too far. I could never believe that a group of students sitting around a table discussing triangles would eventually discover Pythagoras' Theorem. Isaac Newton claimed he discovered those things which he did discover by "standing on the shoulders of giants" – by using the accumulated knowledge of the ages.

It was impossible to get my point across at the Staff Training Sessions because those who didn't fall in with this perceived wisdom were barred from positions of influence and sent

on even more Staff Training Courses for Indoctrination – or worse. Student Centred Learning, when practised badly, encourages poor teachers to be lazy. Good teachers pay lip service to the concept and then get on with the job of educating those in their charge.

It is my opinion that there are three requirements for a good teacher. They are a sure knowledge of the subject matter, a deep seated desire that others should benefit from that knowledge and the ability to communicate that knowledge.

The word ‘Understand’ used to be banned from statements about the Aims and Objectives of a Course. The ‘formula’ was “Upon successful completion of this course the student will be able to . . .” whether they understand what they’re doing or not! More recently, very recently, there has been a change of heart about the use of ‘Understand’. I have always believed that Knowledge without Understanding is a recipe for disaster.

### **Authors for Archive**

Paul’s aim for Archive is that everyone reading it should feel that can learn something from the articles therein. Let me try to persuade you that you could be such an author – with my help if necessary.

In order to write an interesting and useful article for Archive the requirements, like those for a good teacher, are knowledge, a desire to communicate and the ability to do so.

From my earlier digressions you will know that by Knowledge I do not mean Qualifications. Every enthusiast, including you, will know something which is of interest to others and which, presently, they don’t know. There may be others who appear to be better qualified than you to write about it but it may be that what they have at their fingertips are facts rather than the deep understanding of the subject which you have. Worse, those who are qualified by virtue of their ability to recite facts often miss some obvious point.

Poor teachers parade facts; good teachers encourage and provide understanding. Facts can get you qualifications but understanding provides the scale with which real knowledge can be measured. If you become an author for Archive then it is your knowledge and understanding which needs to be communicated not just the facts.

The desire to communicate is present within all of us. The motivation differs. For a good teacher the motivation is that the student should become better educated. By this I don’t mean that the student should become better qualified but that the quality of their life should be improved by the knowledge and understanding which they have gained during their learning experience. As a teacher, my aim was to peddle wisdom – not mere facts. We have all met the person who likes to show off the extent of their knowledge. Their motivation for communicating fact is to impress and not to teach. They have little if any desire to share their knowledge with others; indeed, some, in their insecurity, actively refuse to do so. They make the worst teachers and students dislike them intensely.

If it is your desire that others shall benefit from your experience then it will show in your patience with detail; it will be displayed particularly when you are faced with someone who finds it difficult to understand the point you are trying to make. You will take the time to make sure that what you are saying can be understood by all and not just by those who

already know! It is all too easy to give up on the slow-to-learn student – but often they are the most grateful for the understanding you can impart.

Thirdly, you need the skill to communicate your knowledge and understanding.

I assure you that this improves with practice much more quickly than you might at first imagine. My first tip to budding authors for Archive is that you study the style of those writers that you find understandable. Secondly, think about what is important, why it seems so important to you, and imagine the eyes of your reader lighting up when they understand the thing you know. If you truly desire to improve the other's understanding then you will be highly motivated to use language which has meaning for them rather than intimidating jargon which they will ignore. You will learn quickly from your mistakes.

If you believe that, because of your knowledge and experience, you have something to offer to the readers of Archive but are unsure that your presentation skills are adequate, then send me a copy and I'll help you improve it. Note that this offer is not 'send me ideas for an article' but is 'send me your article' – my offer is that I will help you to present your ideas in an attractive way without changing the content.

### **Finally**

Please write to me at the Abacus Training address which you'll find in Paul's Fact File at the back of Archive. That Fact File includes email and fax addresses. I would prefer that you don't telephone. If you have anything of more substance than a few lines I would like a disc copy particularly if you are having a problem. A disc with an example file is so much easier for me than a description in words which I might misunderstand. Please include return postage if you want a reply. A self addressed sticky label is helpful.